

REPT
BATTERO

REPT BATTERO

COMPANY INTRODUCTION

2026 | REPT Energy,
Driving a Sustainable Future.

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GROUP INTRODUCTION

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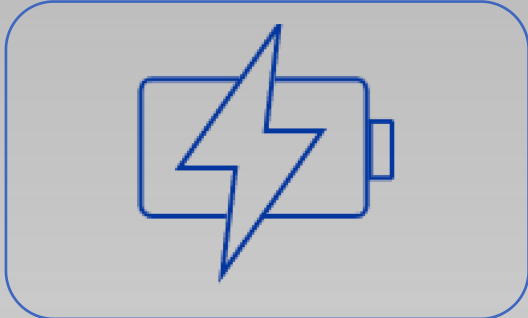
Refining Stainless Steel for a Century,
Building a Green Future

Tsingshan Holding Group - A Fortune Global 500 Company

TSINGSHAN INDUSTRY INTRODUCTION

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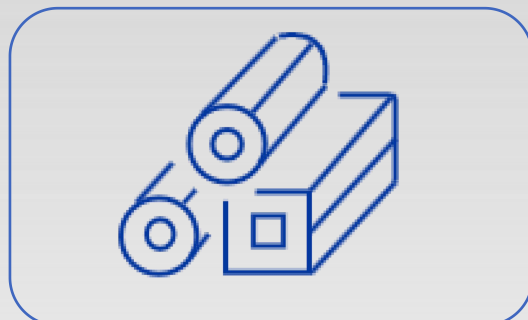
Main Business Areas



New Energy Battery
Research and
Manufacturing



Nickel and Lithium
Mines R&D and
Production



Stainless Steel
Manufacturing
and Trade

Group Structure



永青科技集团
YONGQING TECHNOLOGY GROUP



永青集团
ETERNAL TSINGSHAN GROUP CO., LTD.



青拓集团
TSING TUO TSINGTUO GROUP



青山控股
TSINGSHAN



上海鼎信投资(集团)有限公司
SHANGHAI DECENT INVESTMENT (GROUP) CO., LTD.

Ranked **254** th

on the 2026 Fortune
Global 500 List

Ranked **11** th

China's Top 500 Private Enterprises in
the Manufacturing Industry

No.1

Nickel production

No.1

stainless steel
production

Development History

1988年

Company
founded

1992年

Entered the
stainless steel
industry

2003年

Formed
Tsingshan
Holding Group

2009年

Invested in mining
operations in
Indonesia

2018年

Became the world's largest nickel producer
and fully integrated the upstream and
downstream sectors of new energy lithium
batteries

COMPANY INTRODUCTION

02

Leading the Future, Anchored in Safety

REPT BATTERO Energy Co., Ltd.

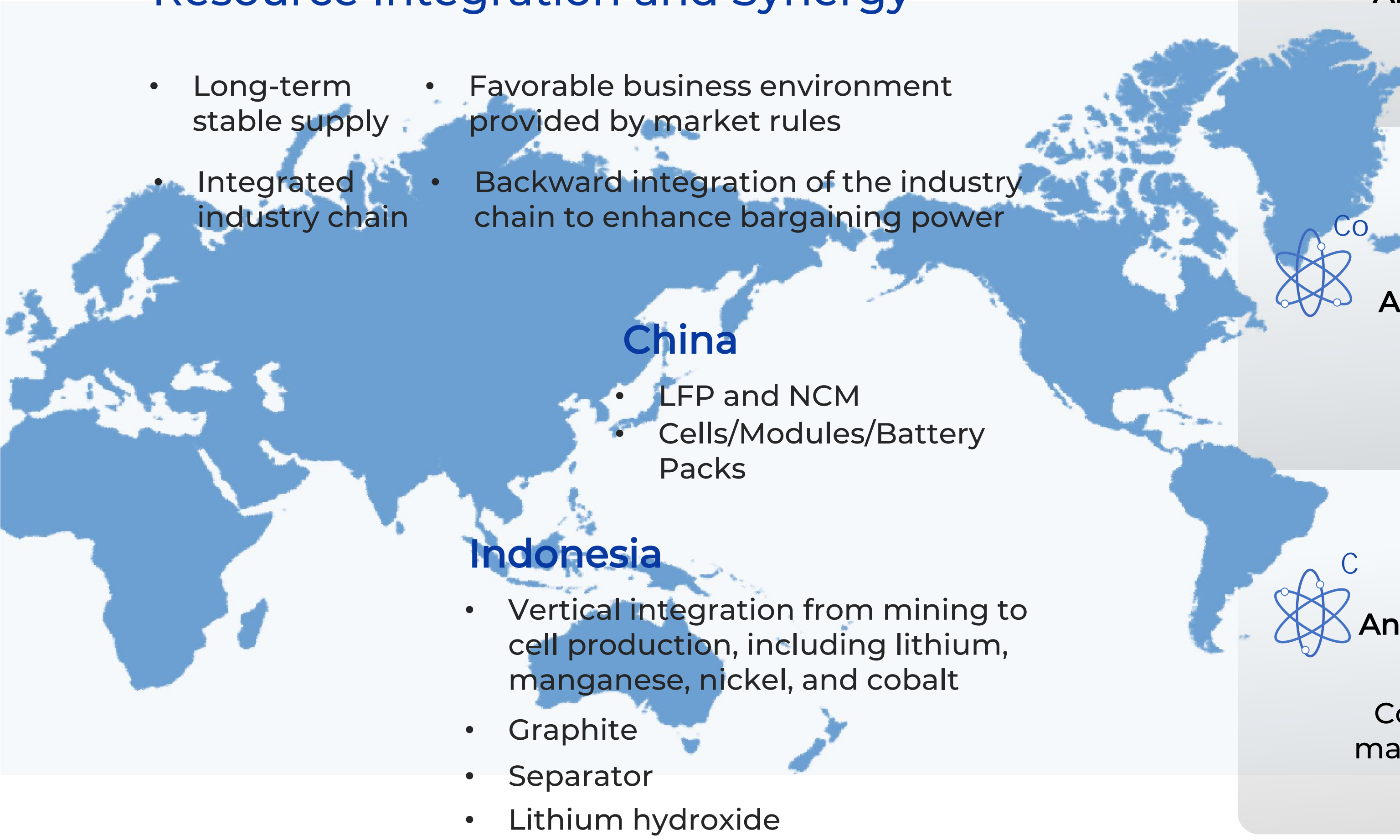
NEW ENERGY INDUSTRY CHAIN

Rapid Expansion of the Industry Chain

Tsingshan Group plans to expand across multiple segments of the lithium battery value chain through direct holdings or equity investments.

Resource Integration and Synergy

- Long-term stable supply
- Favorable business environment provided by market rules
- Integrated industry chain
- Backward integration of the industry chain to enhance bargaining power



Partner

 **Lopal** 龙蟠科技

 **antam**

**GEM**

**BTR**
Better our world

**CNGR** 中伟

**eraMet**

**HUAYOU**

**BRUNP** 邦普循环
BRUNP RECYCLING

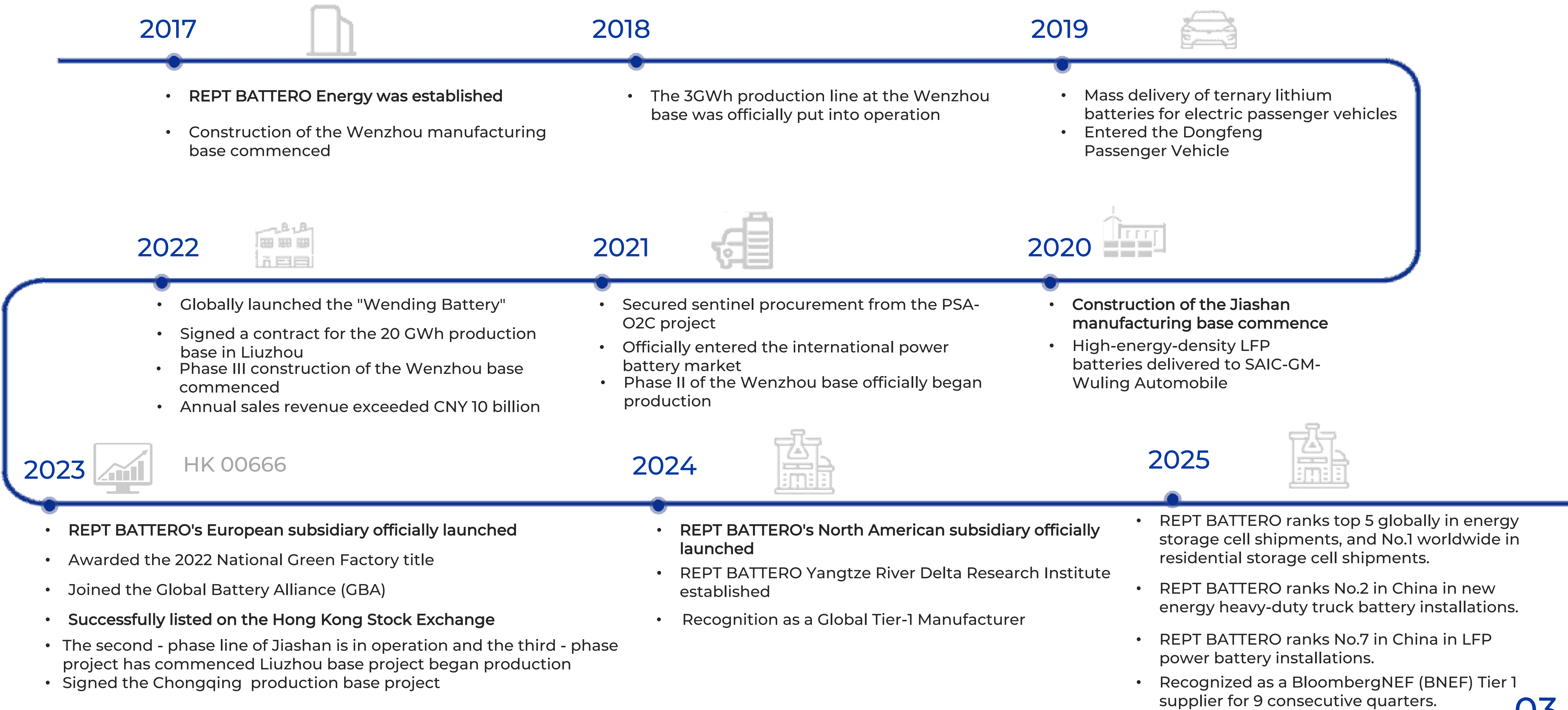
**伟明环保**
WEI MING ENVIRONMENT

**CMOC**
洛阳铝业

**HANWA**

**盛新锂能**
CHENGXIN LITHIUM

DEVELOPMENT HISTORY



Experts in New Energy Power and Energy Storage Battery

REPT BATTERO Energy Co., Ltd., founded in 2017, is the first new energy enterprise launched under the strategic expansion layout of Tsingshan Industrial Group. The company mainly focuses on the R&D, production and sales of lithium-ion batteries. We deliver comprehensive solutions for new energy vehicle (NEV) power systems and intelligent energy storage scenarios, and cooperate with partners worldwide to advance the global shift toward a sustainable and green energy future.



R&D CAPABILITY

Through continuous innovation in materials, processes, structures, manufacturing techniques, and business models, we provide customers with unique and differentiated solutions, jointly advancing the industry and creating a better future.

03

We integrate standard development/product certification, functionality, performance, safety, and reliability testing and predictive analysis to offer customers the ultimate quality and safety solutions

Testing and Validation Center

We possess comprehensive testing and validation capabilities across all levels, from raw materials, key components, modules, and battery packs, to end-use systems. We are certified with CNAS/ISO17025 and IATF16949 qualifications.

Reliability Analysis and Design

Reliability analysis of battery systems is conducted across subsystems (electrochemical, electronic, electrical, and mechanical) and key components' reliability. Through in-depth analysis of the failure mechanisms of key components, combined with accelerated testing methods and life prediction algorithms, we predict the reliability of battery systems.

Safety Analysis and Design

Safety is the core competitive edge of REPT BATTERO products, with a commitment to achieving zero safety incidents. By accurately identifying and assessing safety risks, and incorporating advanced safety technologies, we ensure that products are always reliable and secure.

Standards and Certifications

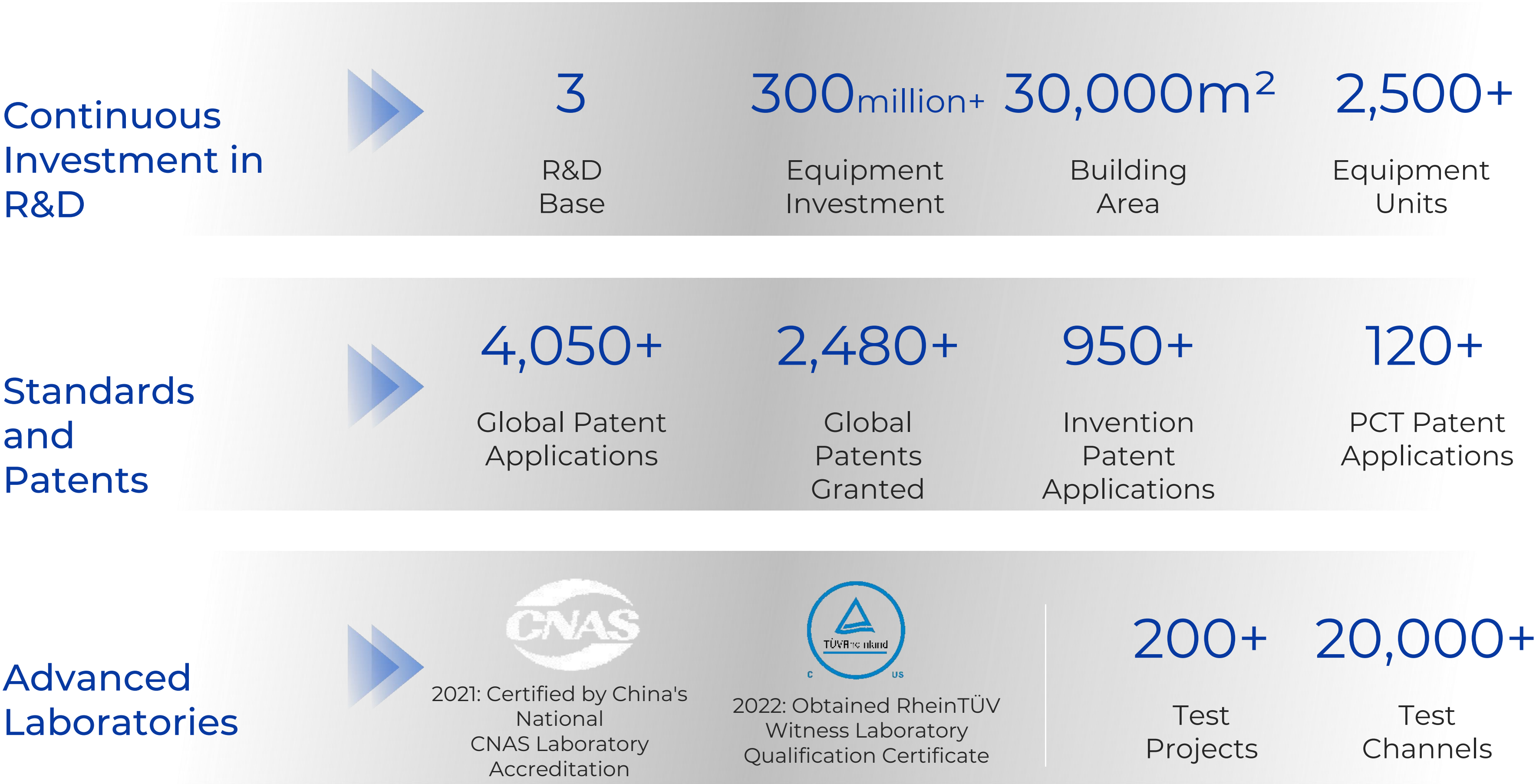
We ensure our product solutions comply with regional standards and certification requirements, while actively contributing to and leading the development of industry standards.

Over 100 overseas product certifications



Core Competence - Top-tier Technology Center

The hardware configuration and capabilities of our technology center fully meet standard requirements and address the needs of customers in sectors such as automotive and energy storage.



Innovation in Design and Intelligent Manufacturing



Extreme Chip Design

- Multi-dimensional Solid-Liquid Interface Design Technology
Enhanced the Activity of Dual High Electrode Foil
- Production management
Utilize the intelligent control system to adjust the equipment parameters according to the production data.
- Quality control and management
Intelligent manufacturing, quality control and management throughout the whole life cycle, and cross-departmental collaboration mechanism



Extreme Manufacturing

- Powerful Single-Line Manufacturing Capacity
> 10 GWh Annual Production Capacity
- Ultra-high-speed Automated Production Line
50PPM Square Aluminum Shell Production Line
- Lean Quality Control
> 6,000 Control Points & > 1,000 AI Monitoring



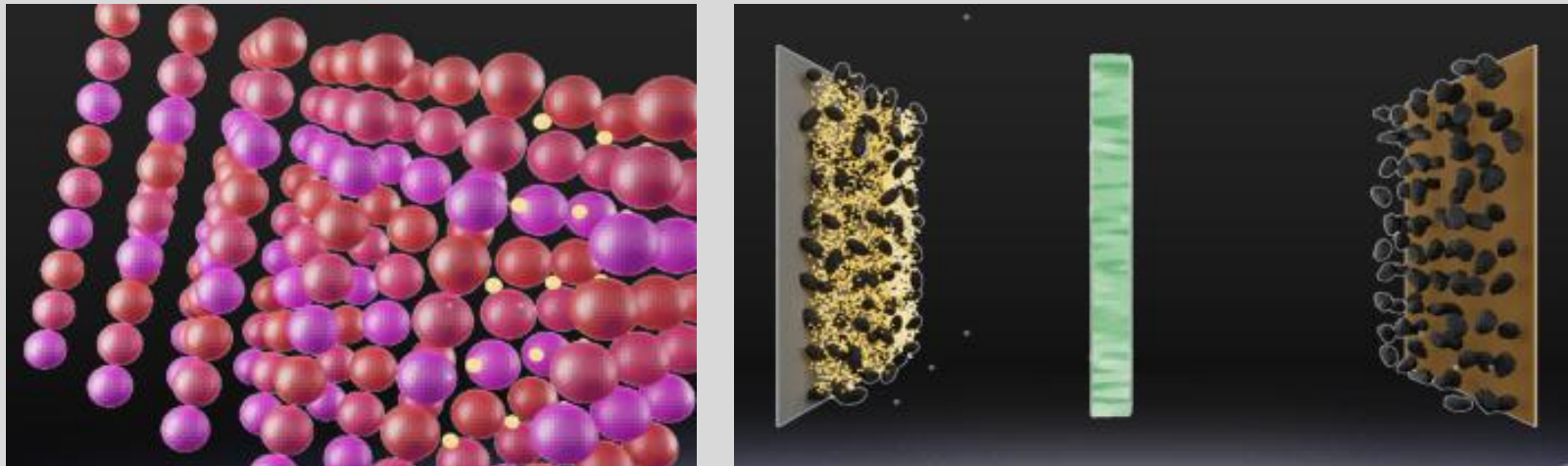
Digitalized Intelligent Factory

- Next-generation Zero-Carbon Factory
Smart Energy Management + Green Power Applications
- AI-driven
Digital Twin + Advanced Manufacturing Models
- 30 GWh Single Super Factory
30% Improvement in Space Utilization

Self-developed Core Technologies for Outstanding Performance

Chenxing Ultra-Fast Charging Battery Technology

Cathode Paves the Way, Speed Starts Here
Homogeneous Doping Lithium-Ion High-Speed Channel Cathode
Anode Regulates the Flow, Connectivity Reaches All
Isotropic Multi-Dimensional Channel Anode

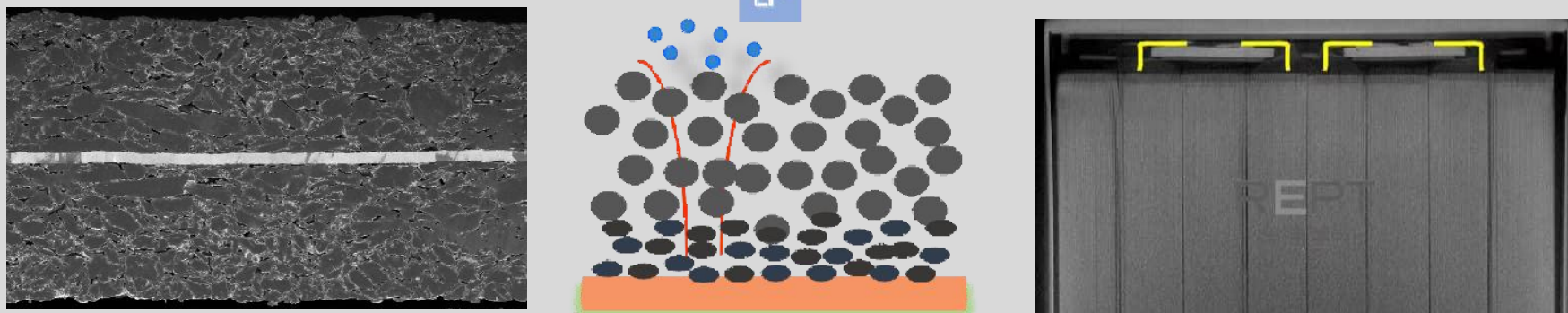


Hybrid 4C Ultra-Fast Charging Battery Technology

Multi-Layer Coating
Multi-Grade Pore Channel
Electrode Design

High Conductivity
Ultra-Fast Transport
Design

High Conductivity
High Volumetric
Utilization Rate



Independently developed CSU (Sampling) module

Meet multiple scenarios

- Intelligent fast charging strategy
- Cell monitoring and detection
- Optimization of cycle life
- Residual value assessment
- Wireless communication & Cloud Intelligent Management BMS

■ Passenger vehicles & commercial vehicles & energy storage

Meet the national standards

- It has passed the detection of GBT28046 environmental and electrical standards, and wireless communication is realized inside the battery pack.

Wending Battery Technology

Featuring a Wending cover design and a fully integrated fixed Wending structure, this design enables an integrated connection of the internal cell structure, effectively improving space utilization by over 7%

Internal Utilization Increased by 7%

Ion Migration Rate Increased by 30%



Traditional Structure

Wending Structure

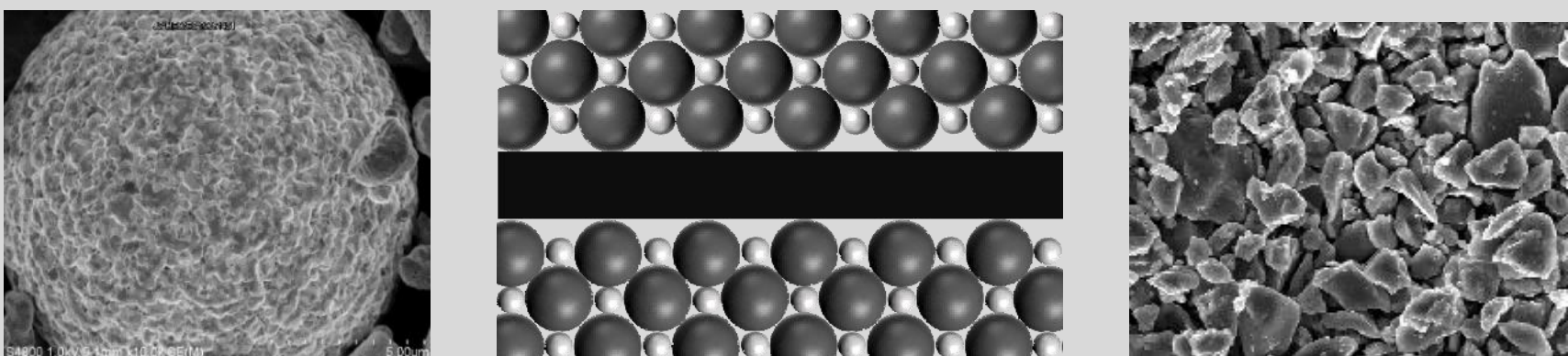
Dual High Solid-Liquid Interface Technology

Novel Solid-Liquid Hybrid Battery Technology

High-Nickel Cathode Solid-State Coating

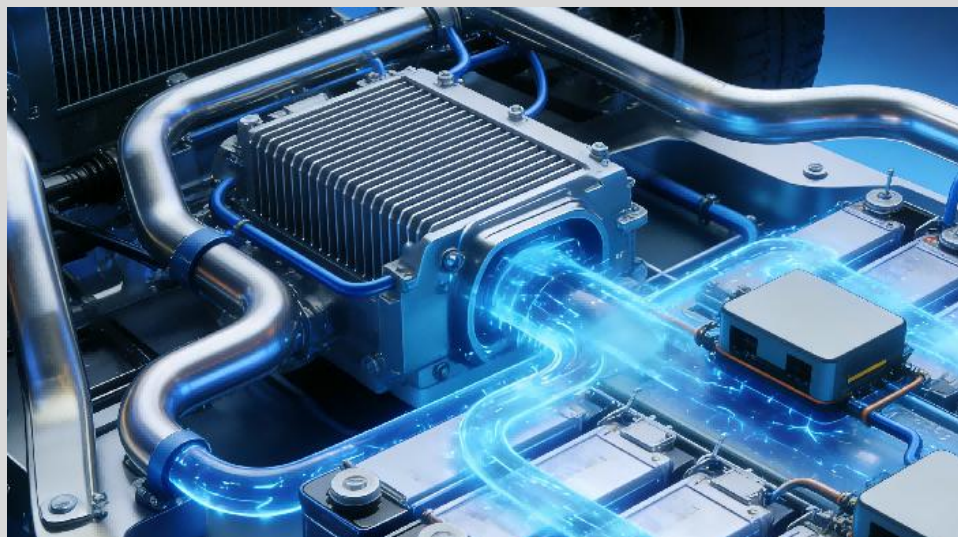
Cathode Main Material Fast Ion Transport

Low Swelling Silicon-Carbon Anode



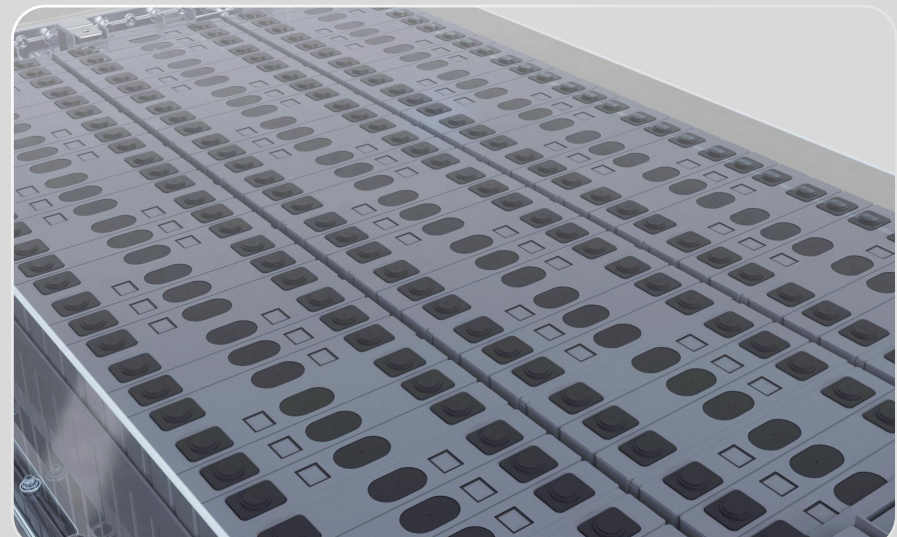
Advanced liquid thermal management technology

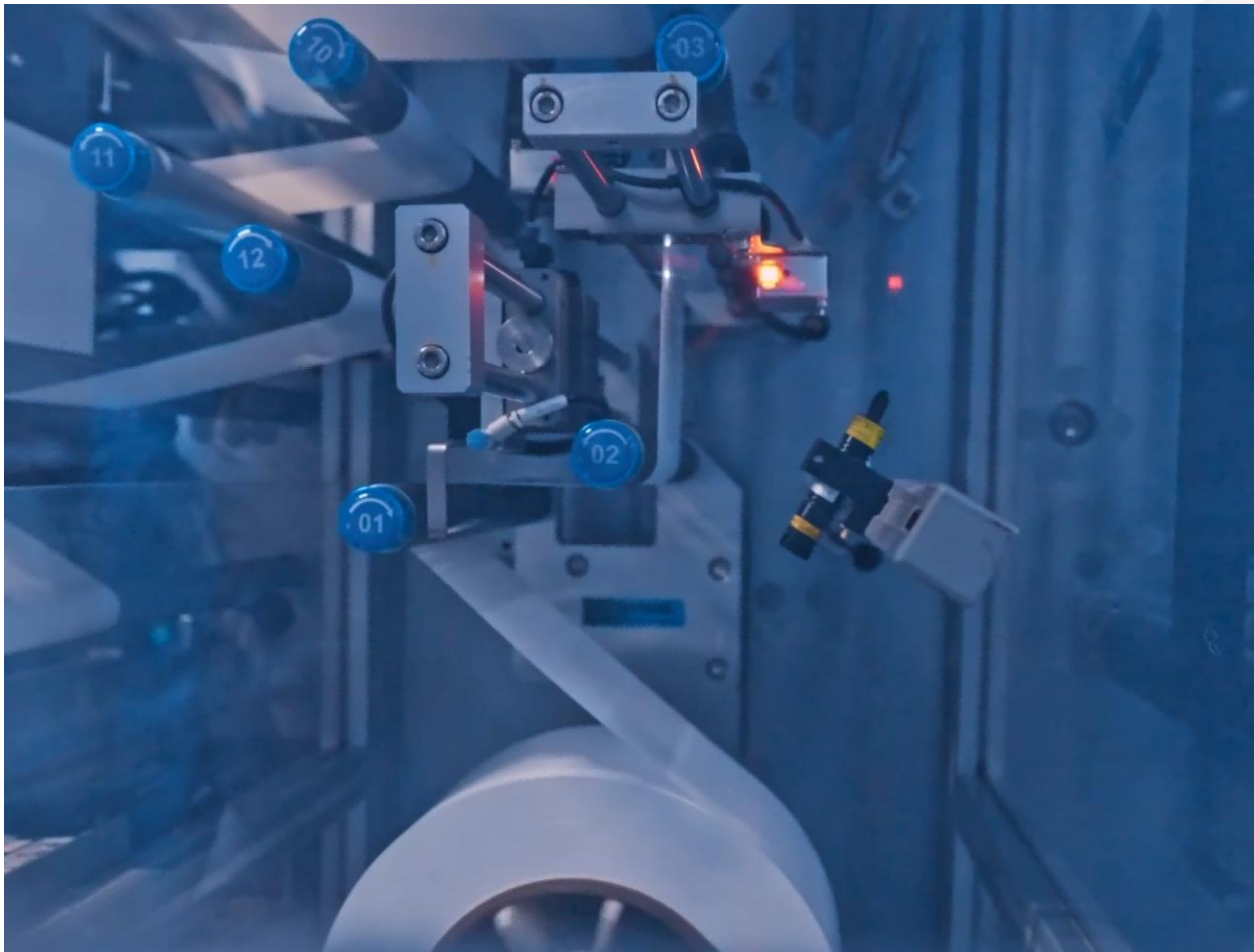
Bid farewell to traditional electric heating. Achieve an integrated design of liquid heating and liquid cooling, and control the temperature difference of a single cluster within 5 °C, creating a friendly and consistent environment.



Venturi Safety System

Venturi Oxygen-Blocking Channel, Graded Microporous Filter Screen Relief, and Intelligent BMS Early Warning





46

Processes' data traceability from raw material intake to delivery



3,000+

MES process control points monitored in real-time



97

Key and critical characteristic controls

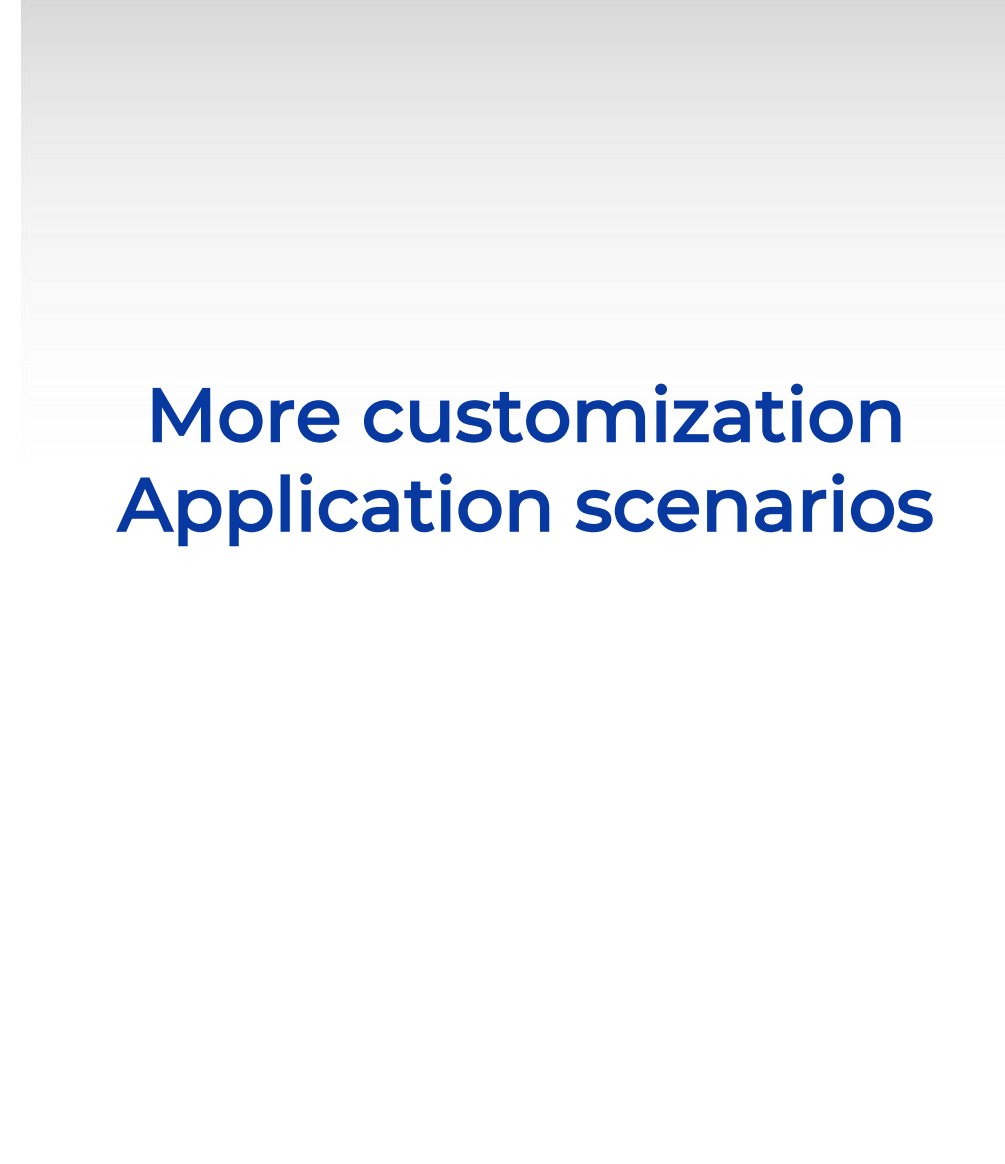
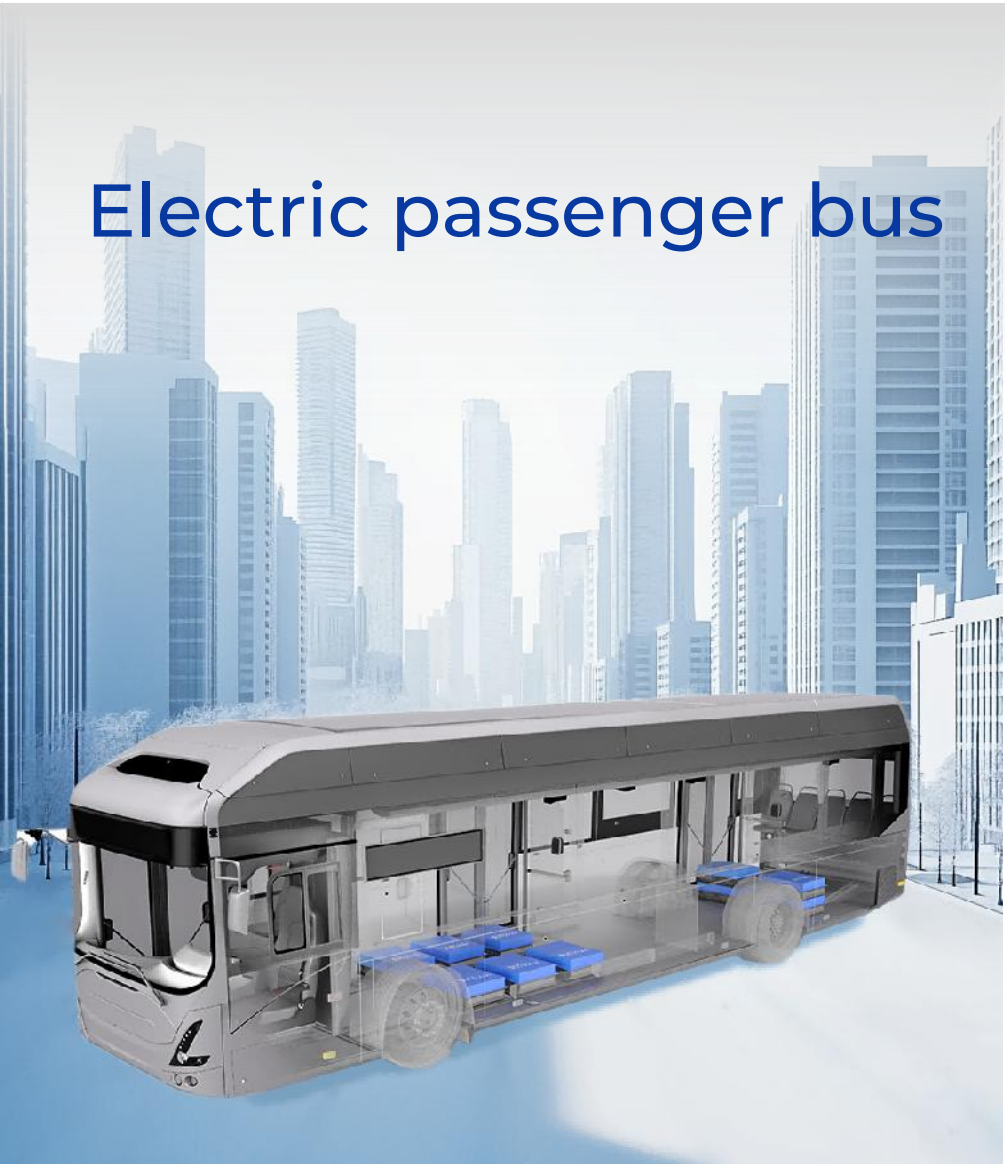


600+

Process control points in compliance with IATF16949 quality management system

APPLICATION FIELD

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ENERGY STORAGE SOLUTION

Comprehensive solutions driving the transformation and upgrading of energy structures.



Application Types	Application Purpose
Peak Shaving and Frequency Regulation	Assisting the grid in peak shaving and frequency regulation, stabilizing the power network
Spinning Reserve	Reducing standby unit activation time and minimizing waste
Black Start	Providing startup power for power plants
Renewable Energy Curtailment Utilization	Addressing the issue of wasted wind and solar energy
Coordinated Utilization of New Energy	Smooth output of new energy, enhancing penetration and tracking of planned curves
Energy Storage Stations	Peak shaving and frequency regulation, providing emergency power support
Backup Capacity	Addressing grid peak power demands
Distributed Micro-grids	Mitigating fluctuations in renewable energy sources
Time-of-use Electricity Price Management	Profiting from peak and off-peak pricing differences
Capacity Fee Management	Enhancing user self-balancing and reducing capacity costs
Energy Storage Charging Stations	Used for electric vehicle charging, resolving configuration capacity issues
Emergency Power Micro-grids	Enhancing the reliability and security of power supply

R&D CAPABILITY

Powtrix 1.0

Y52 liquid cooled energy storage system

Energy Storage ModuleEnergy Storage System		
Group form	1P52S	10P416S
Nominal voltage	166.4V	1331.2V
Voltage range	130V~189.8V	1081.6~1497.6V
Nominal energy	46.592KW	3727.36kWh
Dimensions	1120*810*238	20HQ
Weight	~330kg	35t

Powtrix 2.0

Y104 liquid cooled energy storage system

Energy Storage ModuleEnergy storage System	
Group form	12P416S
Nominal voltage	1331.2V
Voltage range	1040V~1500V
Nominal energy	5015.9kWh
Dimensions	20HQ
Weight	45T

Liquid-Cooled Outdoor Cabinet

Group form	1p416s
Nominal voltage	1331.2V
Voltage range	1164.8~1497.6V
Nominal energy	417.99kWh
Dimensions	1.40m*1.34m*2.36m
Weight	3.7t

Liquid cooled integrated machine

Liquid cooled integrated machine	
Nominal energy	233kWh
Ambient humidity	5%~95%RH
Nominal power	125kW
Dimensions	1250mm×1350mm×2250mm
Weight	<2600kg

Y52 liquid cooled energy storage module

Y104 liquid cooled energy storage module

APPLICATION SCENARIO



Wenzhou, Zhejiang
Shuangyu project peak shaving and
valley filling 14mWh



Jingneng Guangxi Baise
Shared energy storage power station
project 200MWh



Guazhou, Gansu
12MWh Photovoltaic Energy Storage Project



Beijing Energy Inner Mongolia Tongliao
Shared energy storage power station
project 476MWh source grid side energy
storage



Ningxia Huarun Haiyuan
200MWh/400MWh



Yongchuan Songgai Project 400 MWh
Chongqing Independent Energy Storage



Chongqing Three Gorges Yongchuan
200MWh/400MWh



Morowali, Indonesia
Power grid frequency modulation IMIP
project phases I-IV 50MWh



Weda Bay, Indonesia
Power grid frequency regulation IWIP
project phase II and III 28MWh



Shache "project 800 MWh
Xinjiang Photovoltaic Distribution and Storage



PG&E Project
12 MWh Long Term Energy Storage in
California, USA



St Gal Energy Storage Project
226MWh FM energy storage in Texas,
USA



Weda Bay, Indonesia
Power grid frequency regulation IWIP
project phase I 30MWh



Bulgaria 7.45MWh photovoltaic
distribution and storage



The 'MY BESS' project
Malaysia sample 3.7 MWh



North American FLEXGEN Shared Energy
Storage Project
Grid side energy storage 245MWh



The Waratah Super Battery project
1950 MWh FM energy storage in New South
Wales, Australia



Belgium project
126MWh energy storage project



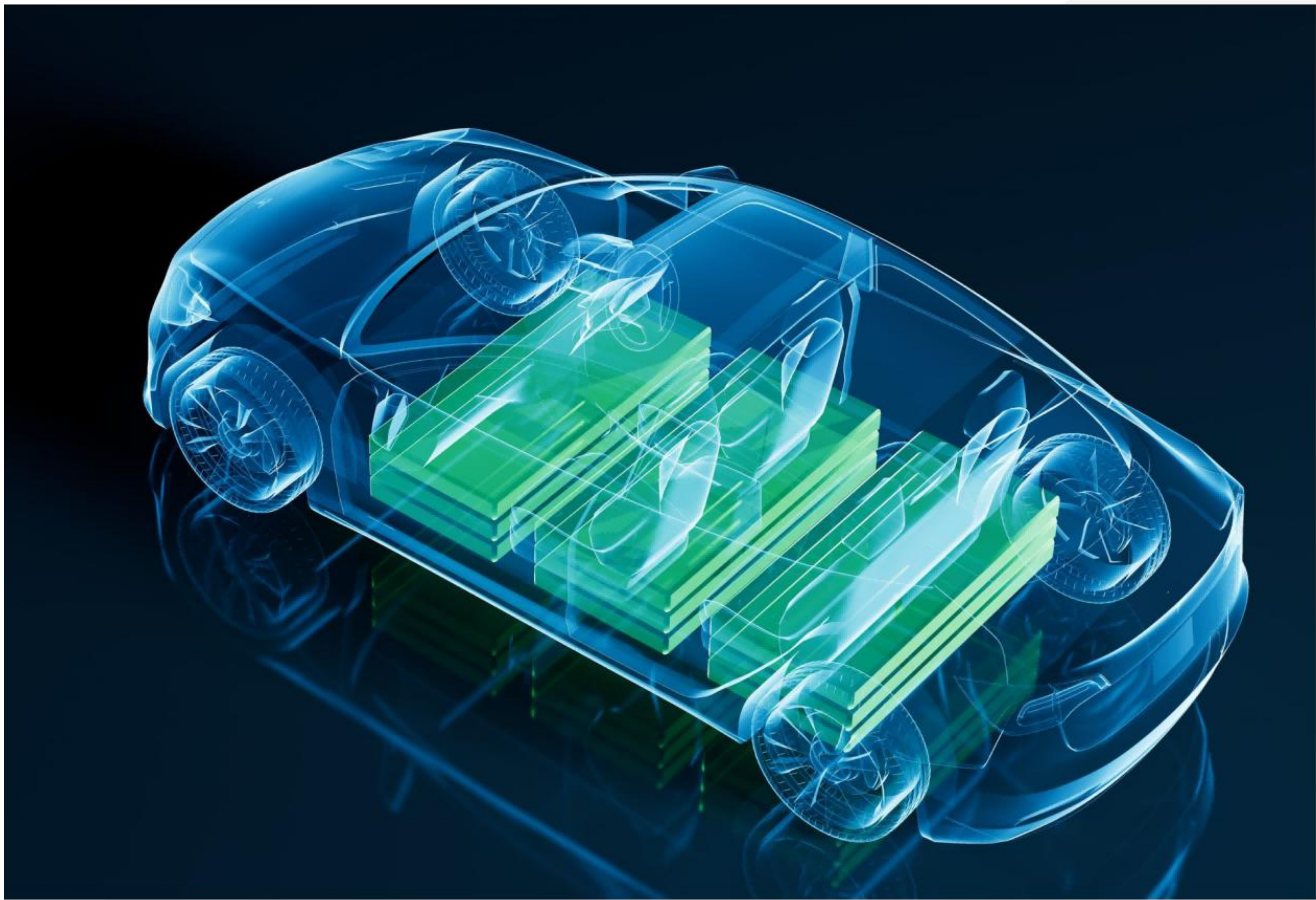
North American FLEXGEN Shared Energy
Storage Project
EV Charge Optical Storage Charging Project



Cascade Energy Storage Project 117.5MWh
California, USA

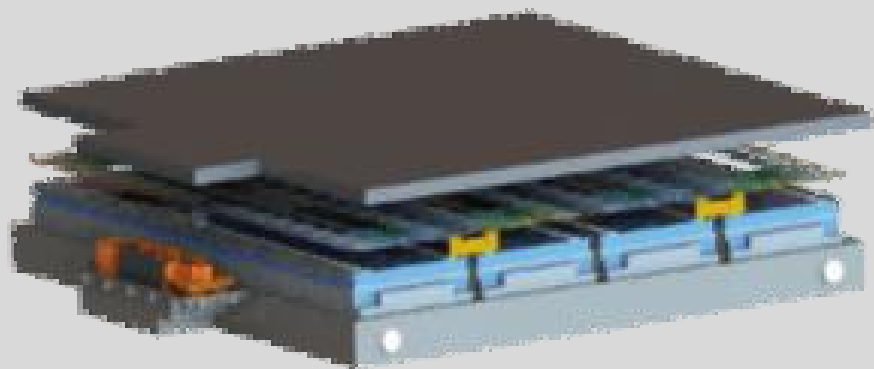
PASSENGER VEHICLE BATTERY PRODUCTS

The hardware configuration and capabilities of our technology center fully meet standard requirements and address the needs of customers in sectors such as automotive and energy storage.



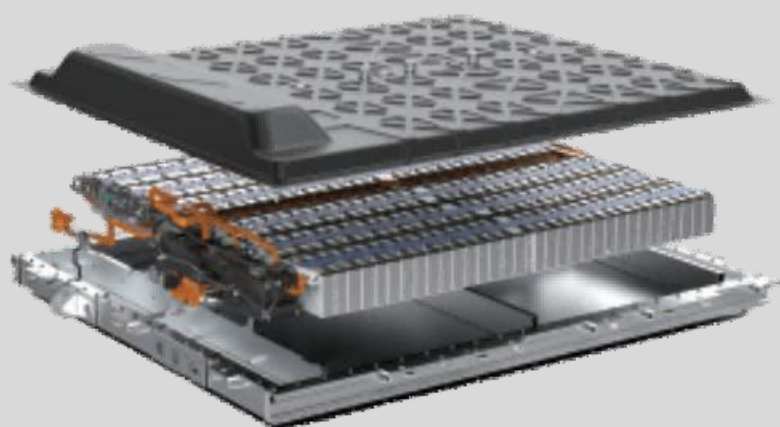
GREEN CTP PACK

Both the battery cells and the complete battery packs can be recycled for secondary use.



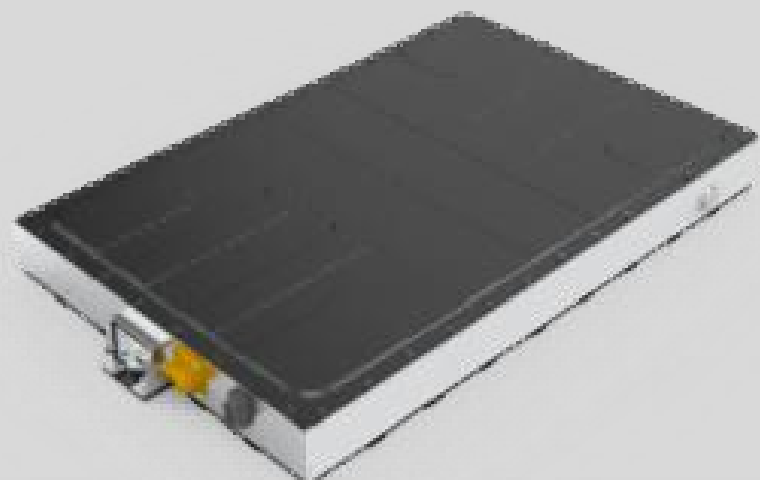
4C Fast-Charging CTP

Average 4C, Peak 6C Fast Charging



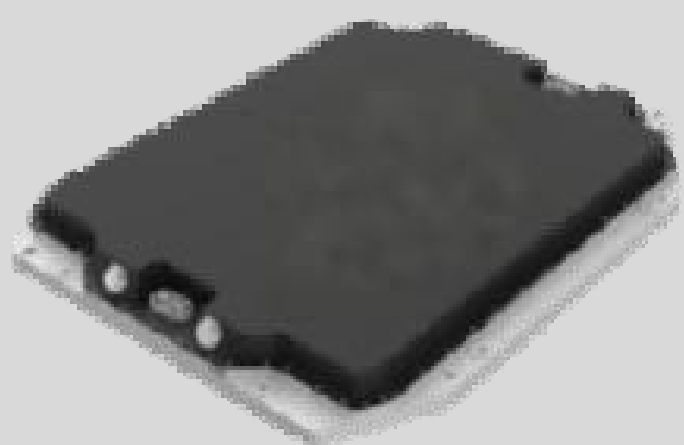
PHEV Battery system

Save fuel and have excellent low-temperature performance.



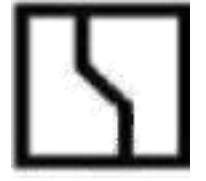
BEV Battery system

super fast charging



PASSENGER VEHICLE POWER BATTERY SOLUTIONS

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BESTUNE YUEY 07(2025)



MG4 ELECTRIC(2025)



SAIC ROEWE D5X(2024)



Volvo EX30(2024)



SAIC ROEWE D7-DMH(2023)



smart 1#(2023)



SAIC ROEWE D6(2023)



SGMW YUNDU (2023)



FAW NAT(2023)



SGMW XINGGUANG(2023)



Stellantis AMI(2022)



FAW E131(2023)



SGMW BINGO(2023)



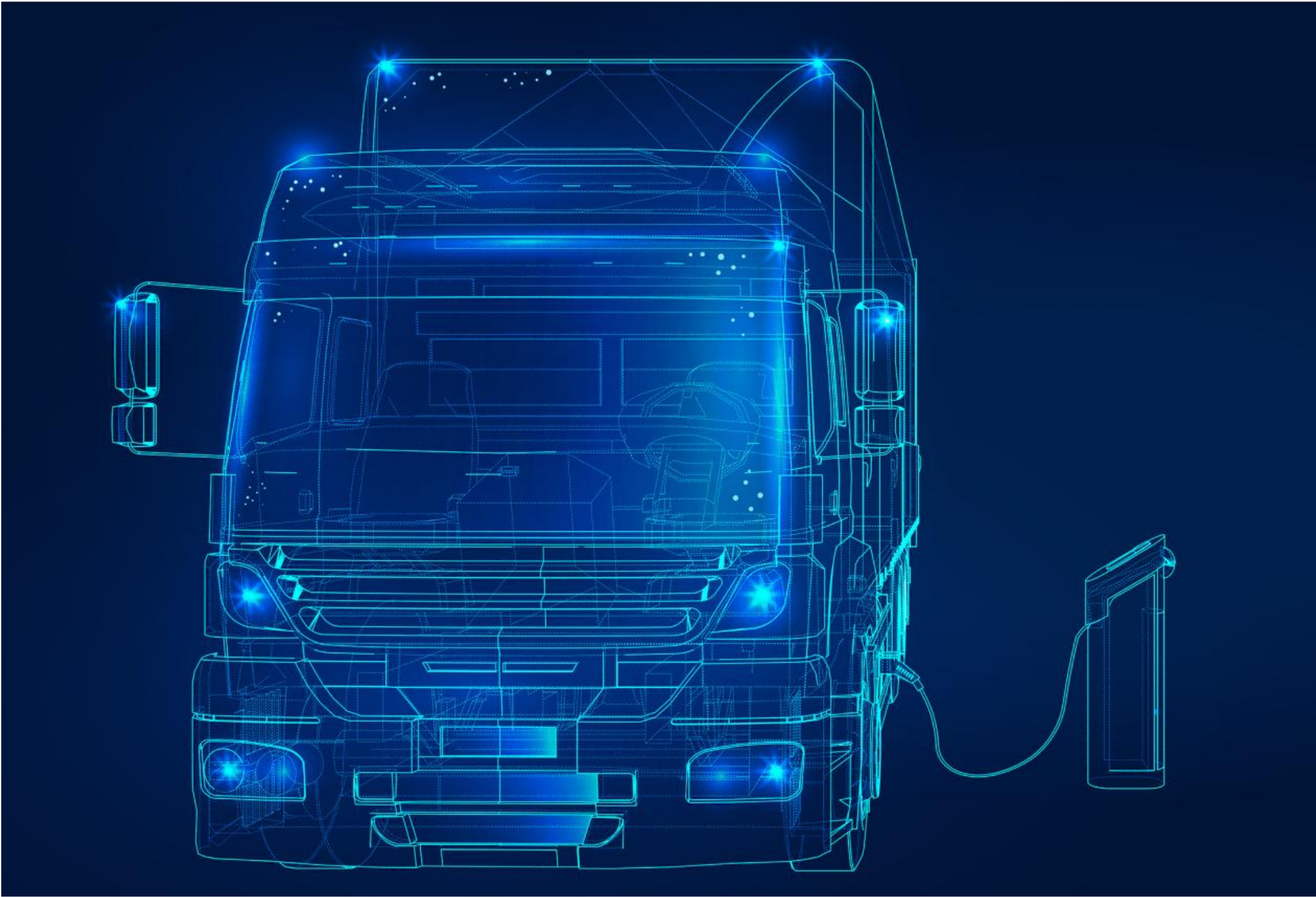
NISSAN D60(2022)



SGMW MINI(2021)

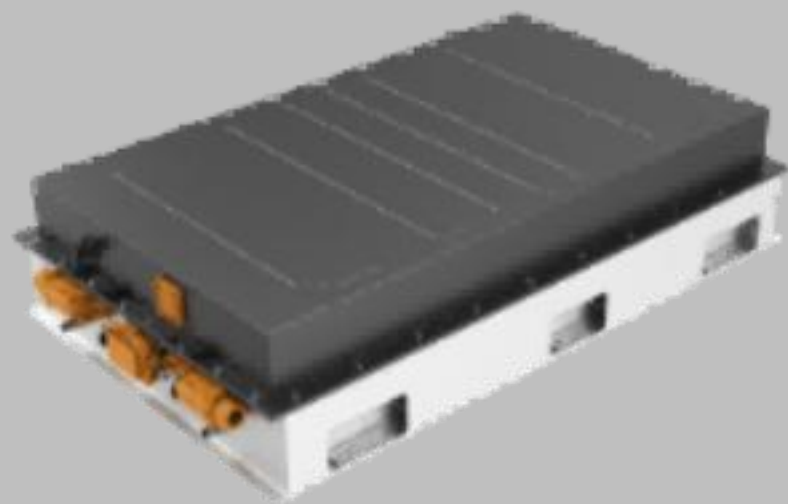
COMMERCIAL VEHICLE BATTERY PRODUCTS

The hardware configuration and capabilities of our technology center fully meet standard requirements and address the needs of customers in sectors such as automotive and energy storage.



Commercial vehicle battery system

Standard C-type box



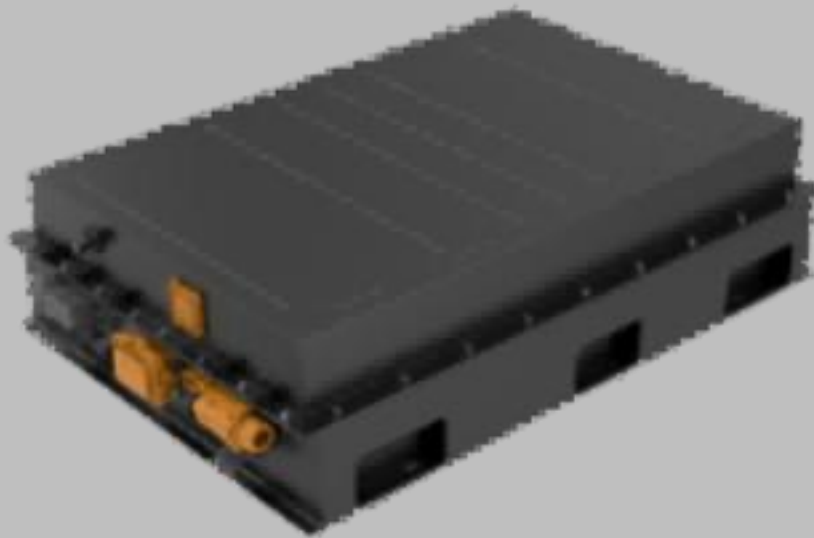
Commercial vehicle battery system

Standard D-type box



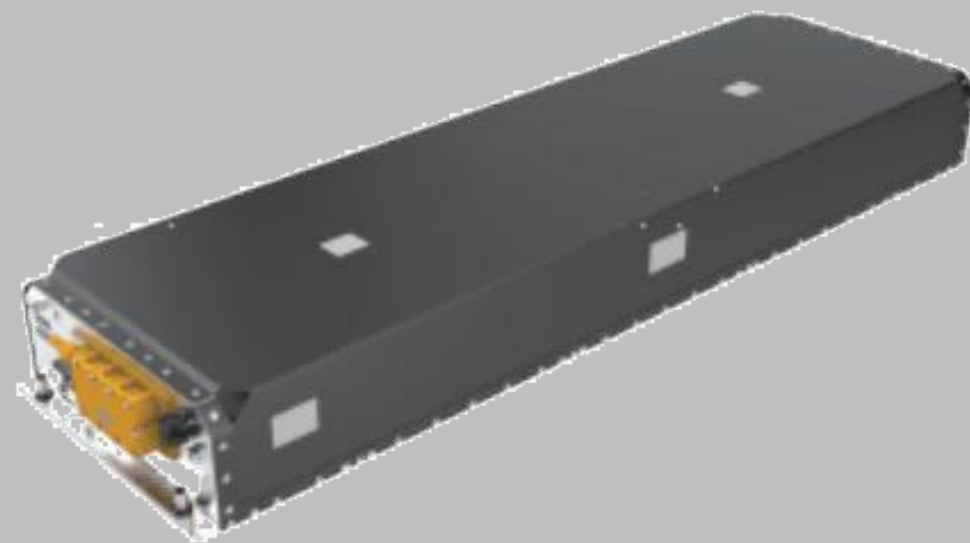
Commercial vehicle battery system

Standard G-type box



Commercial vehicle battery system

Standard F-type box



COMMERCIAL PASSENGER VEHICLE POWER BATTERY SOLUTIONS

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FAW Jiefang

Application Models: Battery-swappable pure electric semi-trailer tractor
Supporting Battery Cells: 230 Ah



SANY zhonggong

Application Models: Sany iSEE2 Electric Dump Truck
Supporting Battery Cells: 230 Ah



Shanxi Heavy Duty Automobile

Application Models: Battery-swappable pure electric tractor
Supporting Battery Cells: 230 Ah



JAC Motors

Application Models: Battery-swappable pure electric flatbed transport truck
Supporting Battery Cells: 230 Ah/324 Ah

ENVIRONMENTAL RECYCLING SOLUTIONS

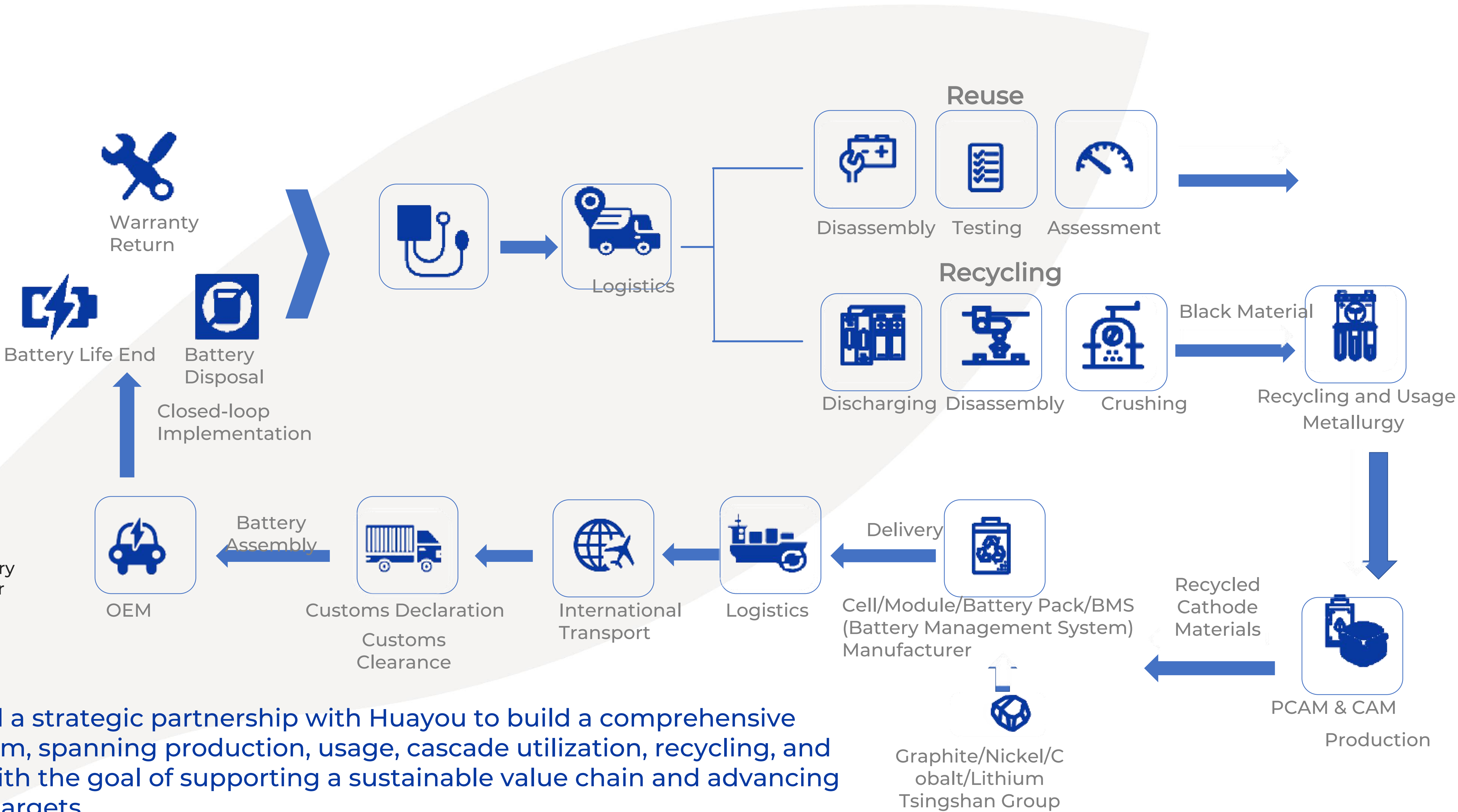
Rapid Expansion of the Industry Chain

Tsingshan Group plans to expand across multiple segments of the lithium battery value chain through direct holdings or equity investments.

Resource Integration and Synergy

- Long-term stable supply
- Integrated industry chain
- Favorable business environment provided by market rules
- Backward integration of the industry chain to enhance bargaining power

The company has formed a strategic partnership with Huayou to build a comprehensive battery industry ecosystem, spanning production, usage, cascade utilization, recycling, and resource regeneration, with the goal of supporting a sustainable value chain and advancing global carbon neutrality targets.



DEVELOPMENT STRATEGY

Driven by Innovation, and building a first-class new energy company

04

CAPACITY PLANNING

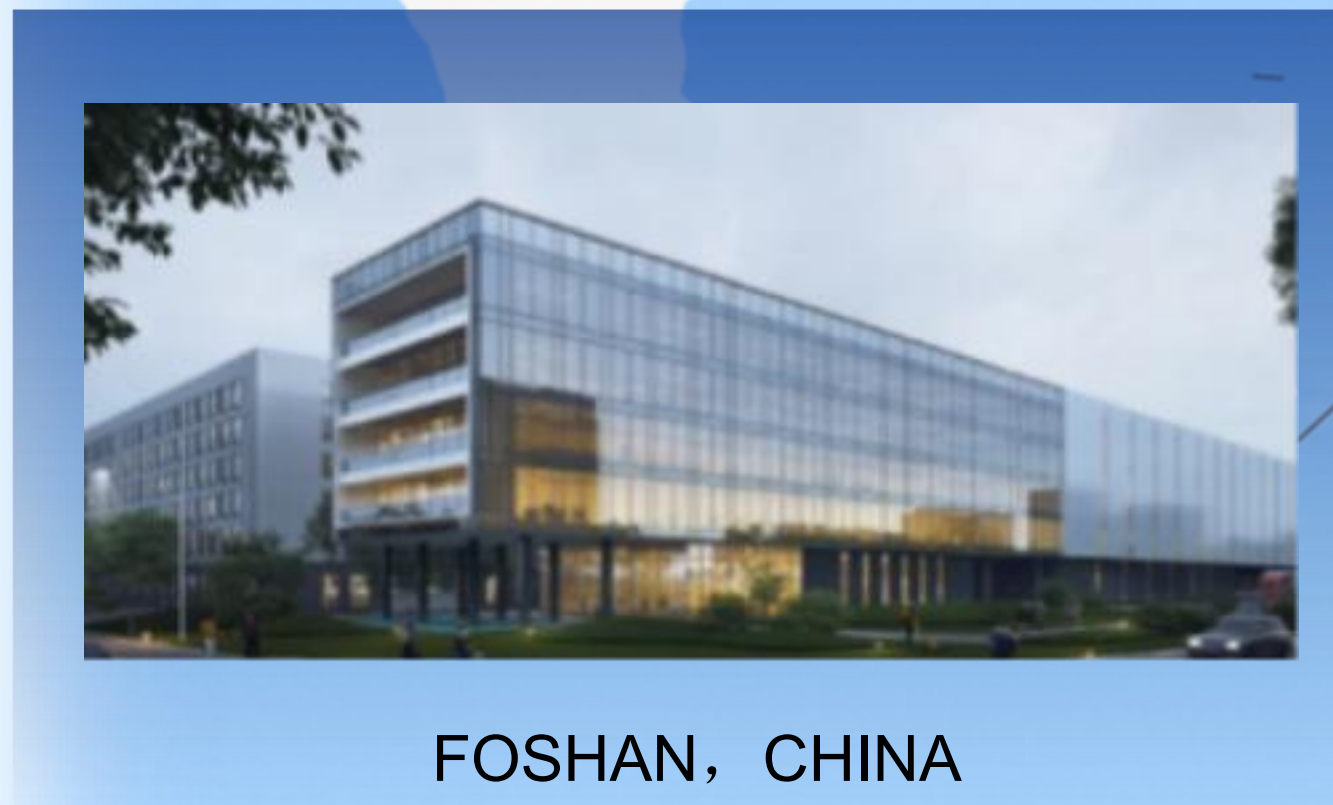
The core industrial hub in Central and Western China focuses on battery cell and PACK production lines, empowering the new energy industrial cluster in Southwest China.



Jointly established with SAIC Motor, it focuses on power battery cells/modules and builds a regional new energy industrial ecosystem.



The core production base in South China focuses on high-end power/energy storage batteries and strengthens the local supply chain.



A strategic R&D and manufacturing pivot in the Yangtze River Delta, empowering technology iteration and capacity implementation.



As the first-launch base for the Group's new energy business, it undertakes the functions of early-stage production capacity carrying and industrial chain collaboration.



The first overseas green factory leverages local resources to serve the Southeast Asian and global markets.

NEW ENERGY INDUSTRY CHAIN



Professional Training/Skill Guidance

Provide Expert Training



Remote Monitoring/Maintenance

Online Technical Support Available Anytime



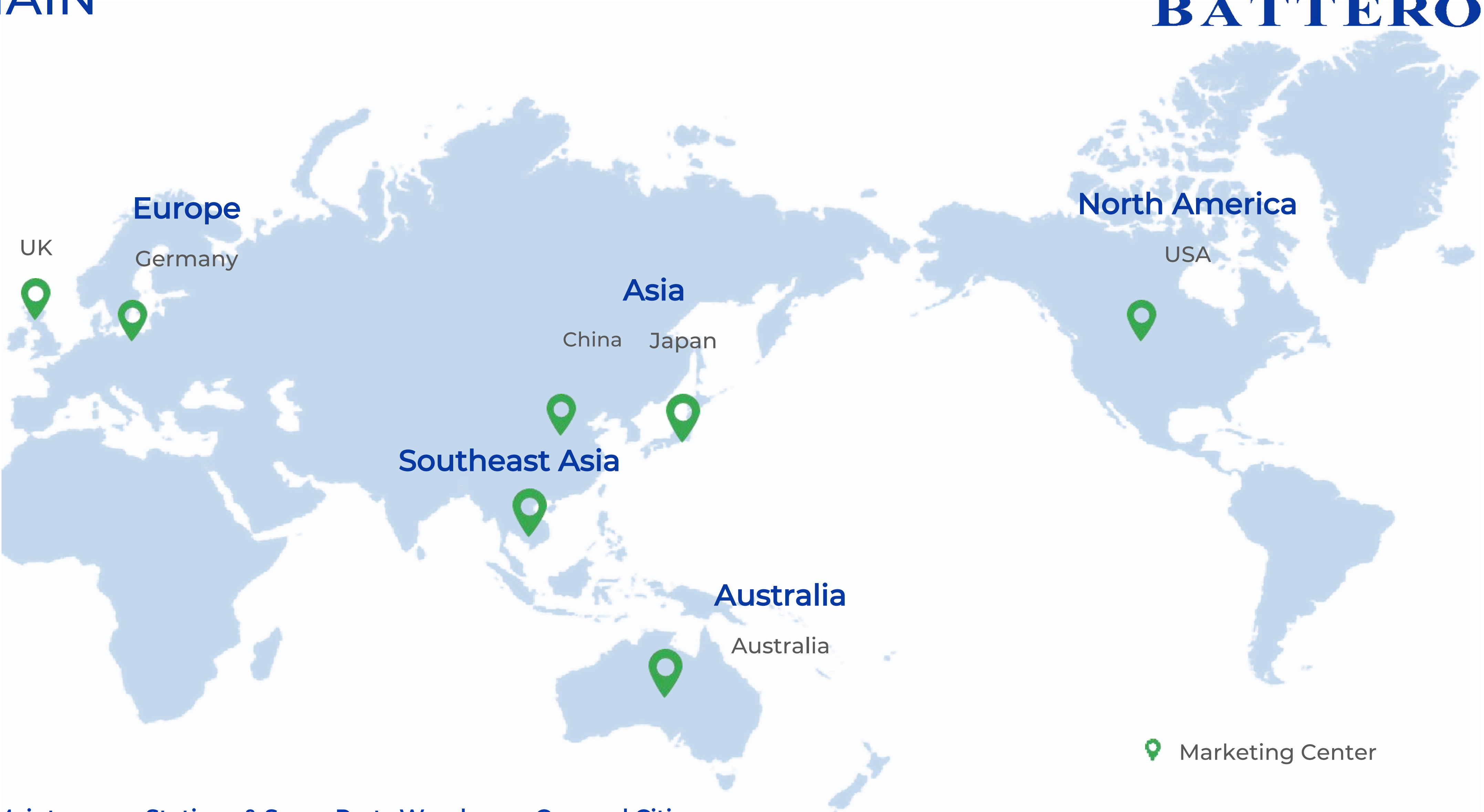
Fast Response/Regular Maintenance

24/7 After-Sales Service Guarantee System



Maintenance Stations/Spare Parts Warehouse Guarantee

Provide Optimal Safety Operation Guarantee



Maintenance Stations & Spare Parts Warehouse Covered Cities

Europe	North America	Asia	Australia
Germany: Munich, Hamburg France: Nice, Paris Spain: Madrid, Barcelona Norway	Texas: Houston Arizona: Chandler Illinois: Chicago California	China: Suzhou Indonesia (Southeast Asia): Jakarta Japan: Osaka, Tokyo	New South Wales: Sydney

EXPLORE DIVERSIFIED COOPERATION MODELS TO LEAD THE DEVELOPMENT OF NEW ENERGY INDUSTRY



Collaborative Development of Raw Materials

Globally, we are jointly developing upstream resources for new energy, including nickel, cobalt, lithium, and manganese, to support the industry



In-depth Supply Chain Cooperation

With European Union OEMs, we provide a stable supply of raw materials and cost control advantages



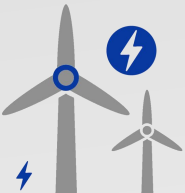
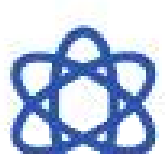
Global Battery Recycling

We have established a strategic cooperation with Huayou Recycling for the global recycling of lithium batteries, promoting sustainable development

In recent years, REPT BATTERO has made significant strides in the new energy sector, continuously innovating in technological research and development. We have also actively pursued diversified collaboration models, securing key partnerships with renowned automotive manufacturers such as RENAULT, Stellantis, and domestic automotive giant SAIC. These collaborations will inject new momentum into the high-quality development of the new energy industry and open up vast prospects for the future growth of REPT BATTERO.

HIGH ESG STANDARDS DRIVE SUSTAINABLE DEVELOPMENT

Sustainability Management Strategy

-  Sustainable Supply Chain 01
-  Energy Utilization 02
-  Battery Recycling 03
-  Waste Emission and Utilization 04
-  Employee Occupational Safety and Health 05
-  REPT Sustainable Development Strategy 06
-  Comprehensive Digital & Intelligent Transformation and Layout 07



-  Jiashan Base, Wenzhou Base and Liuzhou Base have been awarded the title of National Green Factory 
-  Liuzhou Base has been awarded the titles of Guangxi Smart Factory Demonstration Enterprise and Guangxi Green Factory 
-  Jiashan Base has obtained TISAX Level 3, the highest level of information security certification 

Taking the United Nations Sustainable Development Goals (SDGs) as the coordinate, we have built a full value chain sustainable development system covering R&D, manufacturing, supply chain, products and recycling, which is based on reliability, oriented by green development, driven by innovation and centered on talents.

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REPT Energy, Driving a Sustainable Future.